

# Intelligent Open-Loop Picomotor™ Controller/Driver Module – 4 Channels



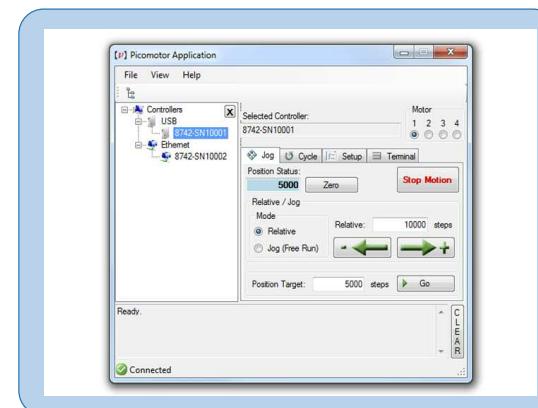
The model 8742 is a 4-axis open-loop intelligent motion controller/driver that provides a compact and low cost solution for driving New Focus open-loop Picomotor products.

It is a single-box solution that can be computer controlled via USB and Ethernet communication interfaces using Newport Motion Control Language (NMCL) command set. Both interfaces are well supported via Windows™ DLL, sample LabVIEW™ VIs, and intuitive graphical user interface (GUI) Windows™ application with device auto-discovery feature.

Each model 8742 controller/driver can control one of four 4-pin RJ-22 single output ports for use with any single-channel Picomotor actuator at any given time. The model 8725 multi-axis adapter can be used to connect the 4-pin RJ-22 output ports on the drivers to New Focus Picomotor products with 6-pin RJ-11 connectors.

## Model 8742 Picomotor Controller / Driver Features:

- Intelligent 4-axis open-loop control
- Compact, integrated controller and driver design
- Innovative Picomotor auto-detection technology
- Plug-and-play USB 2.0 communication
- Advanced 10/100 Ethernet connectivity (Sockets interface, TCP/IP, DHCP, UDP)
- Embedded dynamic HTTP server
- Easy to use Windows™ application with advanced device auto-discovery
- LabVIEW™ and Windows™ DLL support
- Newport Motion Control Language (NMCL) command set
- Local ON/OFF Power switch
- CE and ROHS compliant



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A Newport Corporation Brand

# Intelligent Open-Loop Picomotor<sup>TM</sup> Controller/Driver Module – 4 Channels

## Picomotor<sup>TM</sup> Controller / Driver Specifications

Specifications	8742
Number of Channels	4
Maximum Pulse Rate	Up to 2 kHz
Input Voltage (VDC)	12 (Nominal), 10.5 to 14.5
Interface	10/100 Ethernet, USB 2.0
Power Consumption	11 Watts @ 2 kHz Sustained Speed, 2 Watts Idle
Size	5.45 in x 3.61 in x 1.02 in (148.3 mm x 91.7 mm x 25.8 mm)
Operating Temperature	0°C to 65°C
Storage Temperature	-40°C to 95°C
Weight	0.6 lb (272 g)

## Ordering Information

8742-4-KIT	Four-Axis 8742 Picomotor Controller/Driver Kit
8745-PS	Power Supply, 8742 Controller/Driver, 12V
8745-PWR-CBL	Power Cable, 6 in. Length, 8742 Controller/Driver
8745-USB-CBL	USB Cable, 3 Meters Length, 8742 Controller/Driver
8745-STK-KIT	L-Shaped Stacking Plate Kit, 8742 Controller/Driver
8745-MTG-KIT	Optical Table Mounting Plate Kit, 8742 Controller/Driver



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